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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,862	11/08/2001	L. Mark Ernest	FIS9-2000-0304	2036

7590 02/13/2003

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EXAMINER
VAN DOREN, BETH

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/005,862	ERNEST ET AL.	
	Examiner	Art Unit	
	Beth Van Doren	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 November 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The following is a non-final, first office action on the merits. Claims 1-16 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Agrawal et al. (EP 0 895 169 A2).

3. As per claim 1, Agrawal et al. teaches a process for managing an integrated information technology (IT) system having a plurality of components and providing a plurality of services, the process comprising the steps of:

collecting, at each of the components, usage data indicating an amount of use each component receives in providing each of the services (See at least column 1, lines 15-23 and 38-47, column 7, lines 45-58, column 8, lines 1-10, 19-29, 40-52, and 55-58, column 9, lines 45-58, column 11, lines 42-53, column 13, lines 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, and column 16, lines 33-41, wherein each component of the overall process collects the data associated with the usage/transaction/action of that component in providing each service on the multiple process executions);

reporting the usage data of each component for each service (See at least column 1, lines 15-23 and 38-47, column 7, lines 45-58, column 8, lines 1-10, 19-29, 40-52, and 55-58, column

9, lines 45-58, column 13, lines 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, and column 16, lines 4-16 and 33-41, wherein the usage/transaction/action data of the component is reported to the appropriate database for storage and, later, manipulation);

constructing a valuation function for valuing each service (See at least figures 1 and 3, column 7, lines 15-18, column 11, lines 42-53, column 13, lines 1-6, 18-24, 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 17, lines 33-45, and column 18, lines 1-12, wherein a valuation function is constructed from the discovered usage/transaction/action data that values each overall process that results in a service);

correlating each service with each component used to provide said service (See at least figures 1 and 3, column 7, lines 15-18, column 11, lines 42-53, column 13, lines 1-6, 18-24, 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 16, lines 33-45, and column 17, lines 1-12, wherein the valuation function associates each service that is the output of the process with the activities of the components that occur during the process); and

determining from said correlated services and components a value of each component and a value of said IT system (See at least figures 1, 3, and 4, column 7, lines 15-18, column 11, lines 42-53, column 13, lines 1-6, 18-24, 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 17, lines 33-45, and column 18, lines 1-12, wherein the valuation function that associates the service produced by the process with the components that make up the process is used to assess each component and the overall IT system).

4. As per claim 2, Agrawal et al. discloses a process wherein said value is determined from usage statistics accumulated at each component (See at least column 1, lines 15-23 and 38-47, column 7, lines 45-58, column 8, lines 1-10, 19-29, 40-52, and 55-58, column 9, lines 45-58, column 11, lines 42-53, column 13, lines 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, and column 16, lines 33-41, wherein usage statistics are accumulated at each component and used by the overall system. See at least figures 1, 3, and 4, column 7, lines 15-18, column 11, lines 42-53, column 13, lines 1-6, 18-24, 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 17, lines 33-45, and column 18, lines 1-12, wherein this data is used to form the valuation functions).

5. As per claim 3, Agrawal et al. teaches a process further comprising the step of evaluating a worth of each component based on multiple uses of said component in multiple services performed by said IT system (See at least figures 1, 3, and 4, column 7, lines 15-18, column 11, lines 42-53, column 13, lines 1-6, 18-24, 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 16, lines 4-16 and 33-41, column 17, lines 33-45, and column 18, lines 1-12, wherein each component's worth to the overall process is evaluated based on multiple uses of the component in multiple runs of the IT system. Patterns in the components usage/action in the process that results in the service are looked for in the database using data mining techniques).

6. As per claim 4, Agrawal et al. teaches a process further comprising the step of constructing a relationship table identifying the components used in providing each service, wherein a configuration management process is fed by a change management process in order to maintain the relationship table as changes to said IT system are made (See at least figures 2-4,

column 9, lines 45-58, column 10, lines 2-15, column 11, lines 42-55, column 13, lines 31-42 and 49-55, column 14, lines 1-6, 18-24, and 44-58, column 15, lines 14-22 and 33-41, column 16, lines 4-16 and lines 33-48, column 17, lines 33-45, and column 18, lines 1-12, wherein a relationship chart is constructed after each process and component assessment, this chart identifying the relationship between the components and their usage in the overall output of the process. A change management process allows the relationship tables to evolve as the process and component data updates over time by reanalyzing the patterns. A configuration management process maintains the relationship charts and updates the charts as it is fed the analysis of the updated data).

7. As per claim 5, Agrawal et al. discloses a process wherein valuing a given service comprises determining a value for each transaction conducted in providing that service (See at least figures 1 and 3, column 7, lines 15-18, column 11, lines 42-53, column 13, lines 1-6, 18-24, 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 16, lines 33-45, and column 17, lines 1-12, wherein assessing a process that causes the service occurs by assessing each transaction conducted during the process and looking for patterns and time periods in the transactions of the components).

8. As per claim 6, Agrawal et al. teaches a process further comprising the step of providing for each component an agent for accumulating transaction data regarding services provided using that component (See at least column 9, lines 46-58, column 10, lines 1-5, and column 14, lines 35-55, which discloses a means for accumulating each component's transaction data).

9. As per claim 7, Agrawal et al. discloses a process wherein said value is determined in said determining step in accordance with the transaction (See at least figures 1 and 3, column 7,

lines 15-18, column 9, lines 46-58, column 10, lines 1-5, column 11, lines 42-53, column 13, lines 1-6, 18-24, 31-42 and 48-57, column 14, lines 18-24 and 35-55, column 15, lines 2-10, 33-41, and 47-52, column 16, lines 33-45, and column 17, lines 1-12, wherein the assessment is determined by using the transaction data stored at each component wherein the audited information allows the data mining to occur).

10. As per claim 8, Agrawal et al. discloses a process wherein said transaction data includes the type of transaction and a value associated therewith (See figures 2 and 3 and column 14, lines 44-55, column 16, lines 1-17 and 37-41, wherein the transaction data includes the type of transaction that occurs and an assessment based on the transaction patterns).

11. As per claim 9, Agrawal et al. discloses a process further comprising the step of reporting the transaction data (See at least column 1, lines 15-23 and 38-47, column 7, lines 45-58, column 8, lines 1-10, 19-29, 40-52, and 55-58, column 9, lines 45-58, column 13, lines 31-42 and 48-57, column 14, lines 18-24 and 44-55, wherein the transaction data is reported to the workflow analysis component during the audit).

12. As per claim 10, Agrawal et al. teaches a system for managing an IT infrastructure having a plurality of components for providing a plurality of services, said system comprising:

an agent associated with each of the components, said agent identifying each transaction of a service performed by said IT infrastructure (See at least column 9, lines 46-58, column 10, lines 1-5, and column 14, lines 35-55, which discloses a means for accumulating each component's transaction data);

a information collection system for collecting from said agents transaction information relating to each service performed, said system determined from said transaction information

which of said components are involved in said transaction (See at least column 1, lines 15-23 and 38-47, column 7, lines 45-58, column 8, lines 1-10, 19-29, 40-52, and 55-58, column 9, lines 45-58, column 13, lines 31-42 and 48-57, column 14, lines 18-24 and 44-55, wherein the transaction data is collected from the agent associated with the component into an activity log).

13. As per claim 11, Agrawal et al. discloses a system wherein said information collection system provides a report which identifies for each service the value of said service and the value of the components used in providing said service (See at least figure 3, column 1, lines 15-23 and 38-47, column 7, lines 45-58, column 8, lines 1-10, 19-29, 40-52, and 55-58, column 9, lines 45-58, column 13, lines 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 16, lines 33-41, column 17, lines 33-45, and column 18, lines 1-12, wherein the information collection system uses the data in a data mining process to identity for each service process an assessment of the overall service of the process and an assessment of each of the components in providing the resulting service. This information is reported to the user of the system).

14. As per claim 12, Agrawal et al. teaches a system for managing an IT infrastructure comprising:

an information technology process model which defines a plurality of groups of processes defining information flow for an integrated management model defining the IT infrastructure for a plurality of IT services (See at least figures 2-4, column 1, lines 15-23 and 38-47, column 7, lines 45-58, column 8, lines 1-10, 19-29, 40-52, and 55-58, column 9, lines 5-10 and 45-58, column 11, lines 42-53, column 14, lines 18-24 and 44-55, column 17, lines 1-17 and 33-45, and column 18, lines 1-12, which discloses a process model that defines a plurality of groups of

processes defining the information flow in the integrated business process, the process having a plurality of services that occur during its execution);

a plurality of agents for monitoring each component of said IT infrastructure, said agents collecting transaction information identifying each transaction by service type (See at least figure 2, column 1, lines 15-23 and 38-47, column 7, lines 45-58, column 8, lines 1-10, 19-29, 40-52, and 55-58, column 9, lines 45-58, column 13, lines 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 16, lines 4-16 and 33-41, and column 17, lines 1-10, which discloses means for collecting the usage/transaction/action data of the components, this data identifying the type of activity performed in each transaction);

said agents reporting over said IT infrastructure transaction information to said information process model whereby said information is used by said model (See figure 2-4, column 7, lines 15-18, column 11, lines 42-53, column 13, lines 1-6, 18-24, 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 17, lines 1-17 and 33-45, and column 18, lines 1-12, wherein the data is reported during audit to the information process model means that uses this information to create an assessment model).

15. As per claim 13, Agrawal et al. teaches a system for managing an IT infrastructure wherein said information is processed to provide a table that identifies for each component the service in which the component participates (See figure 2, wherein the information is processed using data mining techniques to construct a table reflecting for each component the the duty for which it is employed and when. See also column 9, lines 45-58, column 10, lines 2-15, column 11, lines 42-55, column 13, lines 31-42 and 49-55, column 14, lines 1-6, 18-24, and 44-58, column 15, lines 14-22 and 33-41, column 16, lines 4-16 and lines 33-48, column 17, lines 33-

45, and column 18, lines 1-12, wherein the activity information is logged and a relationship chart is constructed).

16. As per claim 14, Agrawal et al. discloses a system for managing an IT infrastructure wherein said information from said agents are processed to derive a second table identifying the total value of each service based on the information (See figure 3 and column 17, lines 37-41, wherein the information is processed and a second table is derived that shows the compiled assessment based on the information).

17. As per claim 15, Agrawal et al. teaches a system for managing an IT infrastructure wherein said total value is determined for at least some of said services based on the number of transactions performed by said services (See at least figures 1, 3, and 4, column 7, lines 15-18, column 11, lines 42-53, column 13, lines 1-6, 18-24, 31-42 and 48-57, column 14, lines 18-24 and 44-55, column 15, lines 2-10, 33-41, and 47-52, column 17, lines 33-45, and column 18, lines 1-12, wherein the total assessment is determined for the activities performed during the process by analyzing the patterns in the transactions/occurrences performed during the overall process).

18. As per claim 16, Agrawal et al. discloses a system for managing an IT infrastructure wherein said first table includes a valuation of each component based on its participation in each of said services (See figure 2, wherein the information is processed using data mining techniques to construct a table reflecting for each component the the duty for which it is employed and when. See also column 9, lines 45-58, column 10, lines 2-15, column 11, lines 42-55, column 13, lines 31-42 and 49-55, column 14, lines 1-6, 18-24, and 44-58, column 15, lines 14-22 and

33-41, column 16, lines 4-16 and lines 33-48, column 17, lines 33-45, and column 18, lines 1-12, wherein the activity information is logged and a relationship chart is constructed).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Agrawal et al. (U.S. 6,038,538) teaches a system for logging data about activities in a process and using this data to create a model.

Moore et al. ("Standardizing Reuse") teaches IBM developed corporate standards for reuse of assets in an information technology system.

Du et al. (U.S. 5,826,239) teaches a distributed resource management system which oversees a plurality of workflow processes with a plurality of activities.

Flores et al. (U.S. 5,630,069) teaches a system that is a tool for process analysis, documentation, and design.

Chen (U.S. 6,363,353) teaches a system for storing information about and enterprise and business activities and analyzing this data.

Rothschild et al. (U.S. 5,966,694) teaches looking at the components of a MRP system and valuating the system.

Nye (U.S. 6,341,279) teaches an event model.

Leymann et al. (EP 0 831 406 A2) discloses a database system that stores process data associated with a distributed workflow.

Leymann et al. (EP 0 854 431 A2) teaches a workflow management system with a network of distributed activities that collects data concerning the events of the activities.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (703) 305-3882. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

bvd

bvd
February 6, 2003

Susanna Diaz

Susanna Diaz
Patent Examiner
Art Unit 3623